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U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION REPORT

I. **HEADING**

DATE: February 1, 1999

SUBJECT: Pollution Report for South Green Avenue Site formerly MichCon Station H Site, Detroit, Wayne County, Michigan.

FROM: Ralph Dollhopf, On-Scene Coordinator, U.S. EPA, Region 5 ERB, Grosse Ile, Michigan

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POLREP NO. 2

II. **BACKGROUND**

Site No.:	B552
Delivery Order Number:	NA
Response Authority:	CERCLA
CERCLIS ID Number:	MID981190002
NPL Status:	Not on NPL
MDEQ Notification:	MDEQ notified
Latitude:	42~18'10"North
Longitude:	83~06'19"West
Start Date:	August 4, 1998
Completion Date:	TBD
CERCLA Incident Category:	Removal (PRP lead pursuant to UAO)

III. **SITE INFORMATION**

A. Background

The Michcon Station H site consists of three properties which are located in an urban/industrial area of Detroit, MI. The site was owned and operated by the Detroit City Gas Company between 1913 and 1945. During that time the site served as a manufactured gas plant employing a carbureted water gasification process. The Detroit Gas Company is currently known as the Michigan Consolidated Gas Company (Michcon). Operations of the manufactured gas plant ceased in 1945. The largest property was sold to the American Charcoal Company (ACC), while Michcon retained a small property along the gas main situated along the

northwestern portion of the site. Operations of the ACC consisted of rock wool and charcoal production and blending of various hydrocarbon liquids until 1976. In 1976, the ACC property was sold to the A & A Scrap Iron Metal Company (A & A). A & A utilized the property as a scrap metal storage and processing facility until 1995, when the property reverted to the State of Michigan due to nonpayment of property taxes. In November 1997, the City of Detroit obtained the property from the State of Michigan for Brownfields redevelopment.

In 1984 and 1985, EDI Engineering and Science investigated the site. The scope of the investigation included the assessment of air, surface soils, subsurface soils and ground water conditions. The investigation indicated that surface soils contained elevated levels of lead and that ground water contained elevated levels of cyanide, cadmium, chromium, lead, nickel, phenol and polynuclear aromatic hydrocarbons (PNAs). In February 1998, START conducted a site assessment. The site investigation included the assessment of surface soils. The investigation indicated the surface soils surrounding decayed capacitors contained elevated concentrations of polychlorinated biphenyls (PCBs).

Disposal of debris and soil potentially containing hazardous substances has occurred at the site and surrounding areas. In 1997, the Michigan Department of Environmental Quality conducted a limited removal of 37 drums scattered throughout the site. The drums contained various materials including oils, resins, paint sludge, petroleum distillates and phosphoric acid. On March 30 and 31, 1998, the City of Detroit, Department of Public Works removed and disposed of nonhazardous debris consisting of construction and building debris and tires. On May 28, 1998, the City of Detroit removed and disposed of approximately 540 linear feet of asbestos containing material. In June 1998, the U.S. EPA disposed of two PCB-contaminated electrical capacitors, approximately 23,000 tons of PCB-contaminated soil, and debris consisting of three tanks, 17 gas cylinders, 40 drums and an additional capacitor. In July 1998, the City of Detroit demolished and disposed of the on-site buildings.

A major concern is the migration and exposure of manufactured gas plant waste consisting of heavy metals, PNAs and tar. Analytical results indicated the soil contained elevated levels of total lead and the groundwater contained elevated levels of cyanide, cadmium, chromium, lead, nickel, fluoranthene, benzo(k)fluoranthene, benzo(a)anthracene, and phenanthrene.

B. Site Location/Description

The Michcon Station H site is a former manufactured gas plant site located at 201 South Green Avenue in Detroit, Wayne County, Michigan. The site is bordered to the northwest by the Chesapeake and Ohio Railroad tracks, to the northeast by Post Street, to the southeast by a commercial business, and to the southwest by South Green Avenue and a commercial produce distributor. Approximately 16,500 people reside within a 1-mile radius of the site. A high school is located approximately 500 feet northeast of the site and

residential homes are located approximately 500 feet southwest of the site.

IV. RESPONSE INFORMATION

A. Current Situation

On November 18, 1998, the U.S. EPA approved IT Corporation's (IT) *Work Plan for conducting an Environmental Assessment to Support an Engineering Evaluation/Cost Analysis.* On December 7, 1998, IT began the site assessment as outlined in the work plan. Between December 7, 1998 and December 11, 1998, HM Environmental Services, Inc. (HM), subcontractor for IT, excavated 25 test pits to determine the presence of suspected manufactured gas plant wastes. Between December 14, 1998 and December 16, 1998, Subsurface Alternatives, Inc., drilling subcontractor for IT, installed 11 monitoring wells and one temporary monitoring well. IT performed three SLUG tests (one from each well; MW-8, MW-9, MW-10) on December 30, 1998. IT unsuccessfully attempted to collect ground water samples during December 1998. On January 15 and 18, 1999, IT collected a round of ground water samples.

B. Assessment Activities

On December 7, 1998, IT conducted a site safety meeting and site walk. HM excavated seven test pits. IT collected soil samples from the test pits. IT collected air samples from each corner of the triangular-shaped site. Blue-stained surface soils were observed in locations in the middle of the site along the south-southeast property boundary. Some black-stained soils were observed in the southwest leg of TP-4, the gas holder location in the middle of the site.

On December 8, 1998, IT conducted a site safety meeting. IT collected air samples from each corner of the site. HM excavated one test pit and part of another test pit. IT collected soil samples from the test pits. Black-stained soils were observed approximately 8.5 feet below ground surface (bgs) in TP-8, location of tar/water separator. In TP-9, black-stained debris and fill was encountered within the gas holder located in the southwest corner of the site. Sheet metal was encountered approximately three feet bgs, containing the debris and fill. Outside the perimeter of the gas holder, some black-stained soils were observed approximately 10 feet bgs.

On December 9, 1998, IT conducted a site safety meeting. IT collected air samples from each corner of the site. HM excavated six test pits and completed TP-9. IT collected soil samples from the test pits. Adjacent to the old boiler room location, a subsurface structure (potentially a tar well) was observed. The structure contained sludge, soil, water and a floating oil substance. Tar seepage floating on water was observed approximately 2.5 feet bgs in TP-15, potentially inside the former location of the tar tank. While extending TP-15 to locate the sides of the tar tank, HM damaged an old sewer line. Stored water seeped into the test pit and HM applied a concrete plug over the hole.

On December 10, 1998, IT conducted a site safety meeting. IT collected air samples. HM completed TP-15, excavated six test pits and excavated part of another test pit. IT collected soil samples from the test pits. Black-stained soils containing an odor were observed above the ground water table in these test pits. Tar seepage floating on the ground water was also observed in these test pits. Based on the visual observations, tar was encountered in the middle of the western half of the site from the water gas plant to the old pipe shop and from the tar tank to north of the gas holder, formerly located in the southwest corner of the site. Green colored ground water was observed in TP-19, located at the former location of the gas plant. Black, green and blue-stained debris were encountered above the old purifying house foundation, TP-21.

On December 11, 1998, IT conducted a site safety meeting. A break-in occurred over the night. HM's trailer was vandalized and some equipment was stolen. IT collected air samples. HM completed TP-22 and excavated three test pits. IT collected soil samples from the test pits. Tar saturated soils approximately five to seven feet bgs were encountered in TP-23, immediately west of potential location of another tar well. Green colored ground water was observed in TP-25, located southeast of the tar well grate. Also, tar seepage floating on the ground water was observed in TP-25. While excavating TP-22, HM damaged an old sewer line. Stored water seeped into the test pit and HM applied a concrete plug over the hole. HM removed trees and segregated debris located in the western corner of the site.

On December 14, 1998, IT conducted a site safety meeting. Subsurface installed MW-9 and initiated the drilling of MW-4. IT collected soil samples from the borings. MW-9 was installed using 4-1/4" hollow stem augers. MW-4 was installed using pushbore methods.

On December 15, 1998, Subsurface completed the installation of MW-4 and installed MW-10, MW-8, MW-6 and MW-5 using pushbore methods. IT collected soil samples from the borings. Black-stained soils were observed from 8.5 feet to 10 feet in MW 10, located south of the former gas holder in the southwest corner of the site. Black-stained soils were observed at eight feet in MW-6, located in northwest corner of the site.

On December 16, 1998, Subsurface installed MW-3, MW-1, MW-2, MW-11, MW-7 and GP-1 with a geoprobe. IT collected soil samples from the borings. Black-stained soils were observed at eight feet bgs and a slight sheen was observed in the saturated soils in MW-3, located south of the former tar/water separator. Blue-stained surface soils were observed in MW-2, located the southeast of the former gas plant. From seven to eight feet bgs, the soil was saturated with an oil substance in MW-7, located between the former gas holder and spray pond. Subsurface developed the monitor wells.

On December 17, 1998, Subsurface developed the remaining monitor wells.

On December 21, 1998, IT gauged the monitor wells. IT collected surface soil samples.

On December 22, 1998, IT unsuccessfully attempted to collect samples from the ground water. Atwell Hicks, surveyor contractor for IT, surveyed the site.

On December 30, 1998, IT performed one SLUG test from MW-8, MW-9 and MW-10.

On January 15, 1999, IT collected ground water samples from MW-2, MW-3, GP-1, MW-1, MW-9, MW-7, MW-4 and MW-10. IT collected the samples in a portable ice shanty for protection from the cold.

On January 18, 1999, IT collected ground water samples from MW-6, MW-11 and MW-8. IT gauged the water level in each monitoring well. IT collected additional surface soils.

C. Next Steps

1. IT will submit an *Environmental Assessment Report*.

D. Key Issues

None.

V. COST INFORMATION

Estimated START costs as of 1/30/99: $11,689.42

VI. DISPOSITION OF WASTES

None.